Abstract

Voice alteration is the conversion of one speech signal into other, preserving the source content. For Voice alteration, two main parameters of speech must be considered viz. Static and Dynamic. In this paper, only static parameters are considered. The LP coefficients of source and target speech are extracted using LP analysis. The cross mapping of the extracted parameters is achieved by modifying source parameters in line with the target parameters using TD-PSOLA. Results illustrate that the TD-PSOLA method is reliable and efficient approach for voice alteration. The voice alteration system thus developed can contribute greatly to the Medical and Entertainment Industry where specific voice is essential.

References

- Kazi, Rehan A., Vyas M. N. Prasad, Jeeve Kanagalingam, Christopher M. Nutting, Peter Clarke, Peter Rhys-Evans, and Kevin J. Harrington, "Assessment of the Formant Frequencies in Normal and Laryngectomy Individuals Using Linear Predictive Coding,"
Journal of Voice 21, no. 6:661-668.
- Sewall, Gregory K. MD; Jack Jiang, MD, PhD; and Charles N. Ford, MD, "Clinical Evaluation of Parkinson’s-Related Dysphonia”; The Laryngoscope, 2006, 116:1740-1744.

**Index Terms**

Computer Science
Speech Processing

**Keywords**

Cross mapping formants pitch static voice